

Amendments to the Claims:

64. (New) An optical filter for varying the optical characteristics of a ray transmitted by an optically anisotropic crystal plate,

wherein at least one optically anisotropic crystal plate and at least one substrate are stuck together in a state in which a principal face of the optically anisotropic crystal plate and a principal face of the substrate are perpendicular to the direction of transmission of the ray,

the optically anisotropic crystal plate or the substrate is used as an end face on a ray incident side, and another optically anisotropic crystal plate or another substrate that is thinner than the optically anisotropic crystal plate or the substrate that is the end face on the ray incident side is stuck onto the optically anisotropic crystal plate or the substrate,

the optically anisotropic crystal plate and the substrate are stuck together with a UV adhesive,

the thickness of the UV adhesive is no more than 1/20 the thickness of at least one of the optically anisotropic crystal plate and the substrate, and

the optically anisotropic crystal plate and the substrate are respectively set to the thickness of at least 100 μm and less than 500 μm .

65. (New) An optical filter for varying the optical characteristics of a ray transmitted by an optically anisotropic crystal plate,

wherein at least one optically anisotropic crystal plate and at least one substrate are stuck together in a state in which a principal face of the optically anisotropic crystal plate and a principal face of the substrate are perpendicular to the direction of transmission of the ray,

the optically anisotropic crystal plate or the substrate is used as an end face on a ray exit side, and another optically anisotropic crystal plate or another substrate that is thinner than the optically anisotropic crystal plate or the substrate that is the end face on the ray exit side is stuck onto the optically anisotropic crystal plate or the substrate,

the optically anisotropic crystal plate and the substrate are stuck together with a UV adhesive,

the thickness of the UV adhesive is no more than 1/20 the thickness of at least one of the optically anisotropic plate and the substrate, and

the optically anisotropic crystal plate and the substrate are respectively set to the thickness of at least 100 μm and less than 500 μm .

66. (New) An optical filter for varying the optical characteristics of a ray transmitted by an optically anisotropic crystal plate,

wherein at least one optically anisotropic crystal plate and at least one substrate are stuck together in a state in which a principal face of the optically anisotropic crystal plate and a principal face of the substrate are perpendicular to the direction of transmission of the ray,

the optically anisotropic crystal plate or the substrate is used as an end face on a ray incident side, and another optically anisotropic crystal plate or another substrate that is thinner than the optically anisotropic crystal plate or the substrate that is the end face on the ray incident side is stuck onto the optically anisotropic crystal plate or the substrate,

the optically anisotropic crystal plate or the substrate is used as an end face on a ray exit side, and another optically anisotropic crystal plate or another substrate that is thinner than the optically anisotropic crystal plate or the substrate that is the end face on the ray exit side is stuck onto the optically anisotropic crystal plate or the substrate.

the optically anisotropic crystal plate and the substrate are stuck together with a UV adhesive,

the thickness of the UV adhesive is no more than 1/20 the thickness of at least one of the optically anisotropic crystal plate and the substrate, and

the optically anisotropic crystal plate and the substrate are respectively set to the thickness of at least 100 μm and less than 500 μm .

67. (New) The optical filter according to claim 64, wherein an amorphously bonded optical coating is formed at least on the ray incident side end face or the exit side end face.

68. (New) The optical filter according to claim 65, wherein an amorphously bonded optical coating is formed on at least the ray incident side end face or the exit side end face.

69. (New) The optical filter according to claim 66, wherein an amorphously bonded optical coating is formed at least on the ray incident side end face or the exit side end face.

70. (New) The optical filter according to claim 64, wherein the optically anisotropic crystal plate is a crystal plate, and

the substrate is selected from the group consisting of a glass substrate, a resin substrate and a transparent substrate.

71. (New) The optical filter according to claim 64, wherein the substrate is used for both end principal faces of the optical filter, and a portion of the substrate is given an optical coating.

72. (New) The optical filter according to claim 64, wherein the substrate is used for both end principal faces of the optical filter, and these substrates have the same thickness.

73. (New) The optical filter according to claim 64, which is a phase plate wherein a plurality of optically anisotropic crystal plates of different thickness are layered over one another, an incoming ray is split into an ordinary ray and an extraordinary ray, and the optical characteristics of the incoming ray are varied by a phase between these two rays.

74. (New) The optical filter according to claim 64, which is an optical low pass filter wherein an incoming ray is split into an ordinary ray and an extraordinary ray by the optically anisotropic crystal plate, and the optical characteristics of the incoming ray are varied by imparting specific optical separation direction and specific separation width between these two rays.